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Lake Vermilion Land Use Plan

The Plan

For centuries, Lake Vermilion has been used for a variety of purposes, including: hunting, fishing, mining, logging, various forms of boating, permanent and seasonal residences, wildlife habitat, tourism, and other recreational purposes. There is a broad citizen consensus that the lake should continue to be available for a wide variety of uses. The historical use of the lake should continue for future generations.

Many factors went into the development of the Lake Vermilion Land Use Plan. These factors include: results of the citizen survey, the shoreland inventory, background information compiled through the planning process and previous planning efforts, and previously adopted county plans.

The plan serves as a guide for future land use decisions on Lake Vermilion. A land use plan is implemented by many actions, including educational efforts, additional research, capital improvements, changes in policy, and regulations.

The plan is not implemented by any single effort, person or group, but requires the ongoing involvement by all those who have an interest in the future of the lake.

Guiding Principles: Land Use Goals

The plan is divided into four main guiding principles based on the visioning effort that the citizen advisory committee completed at the start of the planning process: Maintain or improve water quality; Balance development & preservation; Preserve northern character and Develop government policy & management practices.

The Lake Vermilion Land Use Plan identifies policies and actions to achieve the stated citizen guiding principles. To organize the Policies and Actions, the plan highlights four main categories in which the Policies and Actions fall, Land use; Water quality; Lake character and Wildlife & habitat.

Implementation strategies are in Appendix A and are identified as Actions.

Lake Vermilion Land Use Plan Guiding Principles

Goals for Lake Vermilion

Early in the planning process, the Lake Vermilion Steering Committee developed a mission and vision for the Lake Vermilion land use plan that were guiding principles to act as the framework for the plan. The overall guiding principles and goals were to: maintain or improve water quality, balance development and preservation, preserve northern character, and develop government policy and management practices. The land use visions described in the concept areas, and the policies and actions are intended to work towards these guiding principles. The following are brief descriptions of each of the guiding principles:

l. Maintain or Improve Water Quality



III. Preserve Northern Character IV: Develop Government Policy & Management Practices

- I. Water quality is a great concern of Vermilion area residents. Clean water is important for recreation, fisheries, public health, and property values.
- II. Through the establishment of concept areas, the plan intends to provide a vision of how to maintain the various characteristics of the lake while balancing this with property owners' desire to develop and use their property.

This guiding principle is arguably of a more philosophical nature and is intended to grasp the values residents believe are important when enjoying the lake.

Elements include the need to protect the resources of the lake such as fish and wildlife habitat, and the quiet, scenic and tranquil character of the lake, but also protect the recreational uses that traditionally have been allowed on the lake and to recognize owners' rights. This guiding principle is an important balance between the need to manage the resource as development pressure increases while also continuing to allow for opportunities to enjoy the lake as people traditionally have.

III. Lake Vermilion is a large lake with over 300 miles of shoreline and it has great diversity in character ranging from the more densely developed areas on the south shore, often on small lots with good road access and commercial activity, to areas with water access only that have a remote and undeveloped character.

IV. Proper management of septic systems, use of shoreland best management practices, and the control of exotic species are important issues.

The plan addresses these issues through policies promoting shoreland best management practices and supporting ongoing efforts to ensure proper wastewater management systems are in place.

Residents are concerned that existing regulations are not enough without proper administration of these rules. Maintenance and management of existing public lands is another concern. Residents are troubled by property tax rates and the ability of residents to pay.

The plan has addressed this principle by developing guidance for certain proceedings such as conditional uses, planned unit developments and variances.

The plan reinforces existing rules and stresses the need to properly administer rules, existing statutes and/or ordinances.

Vision: Concept Areas

The Plan

The Lake Vermilion Land Use Plan is implemented through a variety of means, including education, policy initiatives and regulations. This section of the plan takes the background information found in the first part of the plan and formulates the plan in a manner that sets forth actions to achieve the vision.

The first part of this effort to formally state the plan's vision is the development of land concepts that reflect both existing conditions on the lake and how the plan guides future development. Six concepts have been developed and they are described in the general characteristics and in more detail later in the plan. The six concept areas are applied to the lake area and are shown on Map 4.1. The concept map, along with the general characteristics and detailed concept explanations, are part of the adopted plan. Changes from the map or text will require a land use plan amendment.

The plan's policies are found after the plan concepts, and guidance, entitled "Actions", is found in Appendix A. This section further defines the issues and sets forth actions required to implement the plan's vision for the lake. These Actions are not officially part of the adopted land use plan but are intended to provide guidance regarding plan implementation. There may be additional action items developed as part of the effort to implement the plan concepts and policies. Many of the policies describe specific actions that should be taken based on the plan concepts.

The concepts along with policies will be used to amend land use ordinances, amend zoning maps, provide guidance in reviewing development proposals, define educational and informational efforts and provide ideas that citizens, land owners and those interested in the lake should work on to insure that the vision for the lake is achieved.

General Characteristics of the Concept Areas

Concept Area #1: Sensitive Lands & Waters

General Characteristics

Significant cultural, historical, environmental features

Cemeteries and burial grounds

Parks (Soudan State Park)

Indian and early European settlement sites

Areas with large contiguous wetlands

Near shore aquatic vegetation for fisheries & water bird nesting areas

Restrictive Zone District

Concept Area #2: Open Space/Public lands

General Characteristics

Encompasses public ownership by federal, state, and local authorities

Important to aesthetic environment

Key to maintaining or improving water quality

Provides recreational opportunities

Restrictive zone district

Concept Area #3: Low Density Development

General Characteristics

Sets 2.5 to 4.5 acres as minimum lot size

Retains current 75 feet shoreland setback

Shoreland development level less than 3 dwellings per mile

Contains neighborhood commercial

Areas with considerable public lands, limited road access, or environmental limitations

Concept Area #4: Moderate Density Development

General Characteristics

Sets 1.0 to 2.5 acres as minimum lot size with 200 feet width of lakeshore frontage

Retains current 75 feet shoreline setback

Shoreland development level between 3-25 dwellings per mile

Contains neighborhood commercial

Contains some public lands

Concept Area #5: High Density Development

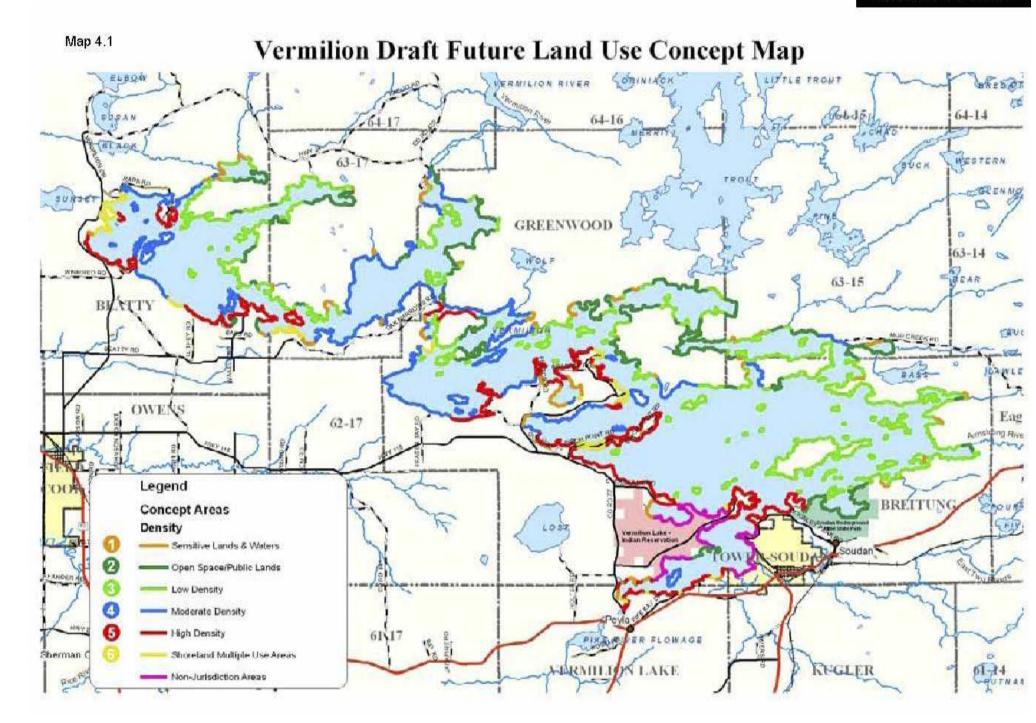
General Characteristics

Sets .5 to 1.0 acre minimum lot size Retains current 75 feet shoreline setback Shoreland development level over 25 dwellings per mile Contains neighborhood commercial

Concept Area #6: Resorts and Water Related Commercial Uses

General Characteristics

Provide common lot size standard of one acre for all commercial uses Retains 75 feet shoreline setback More intense use of the land Sale, lease, rental or trade of goods and services Resorts, marinas, restaurants, campgrounds and others Contains neighborhood commercial



Concept Area One: Sensitive Lands and Waters

Lake Vermilion has significant cultural, historical and environmental features. Preservation of these lands is important for the ongoing protection of the lake's environment and the heritage of people that lived along the shores. Impacts on these sensitive areas should be taken into consideration when reviewing development proposals.

The identification and protection of sensitive lands and waters is an ongoing process. Some of the sensitive areas are specific locations known to the public while some other areas are understood as important but are not inventoried. It is important that these areas are inventoried to better insure their protection. The protection of these resources requires a variety of tools, including education, notification to appropriate parties, use of easements, and government purchase. The selection of the tools to be used will be determined on a case-by-case basis with the eventual development of additional policies designed to insure consistent response.

Areas identified as sensitive resulting from wetland conditions must have a minimum of 600 feet of contiguous shore in wetlands, and the wetlands must extend landward a minimum of 200 feet. Generally, the government lot must be 50 percent or more wetlands in order to be considered classified as sensitive. Sensitive Lands need not include the entire government lot adjacent to the lake if significant areas are upland. Lake Character Policy 4 shall be used as a guideline for determination of all sensitive area designation on zoning maps.

Concept Area Two: Open Space/Public Lands

The Vermilion Plan recognizes the importance of public lands in maintaining the aesthetic, wildlife, water quality and recreational values important to the lake's future. A reduction in public land ownership through sale, land swaps or other means can affect large segments of the population and such a change can have significant land use impacts. The public should have an opportunity to participate in the public process relating to transfer of public lands to private ownership.

State and federal lands are not regulated by local government but these holdings can have a significant impact upon lake visitors and property owners. The Vermilion Plan encourages managing agencies to work with citizens and property owners in making land use decisions on public lands. Also, public lands should be placed in a restrictive zone district to allow for full public debate on the use of the lands should they transfer out of public ownership.

Concept Area Three: Low Density Development

This concept applies to areas that have a low density or undeveloped character and which have at least two of the following characteristics:

- 1. There are no publicly maintained roads within one mile
- 2. More than 50 percent of the land is publicly owned
- 3. Land is near a protected water inlet into the lake
- 4. Land is located on a shallow bay (shallow swampy shoreline, less than 15 feet deep)
- 5. More than 400 feet of shoreline on government lot is a wetland
- 6. Land rises from the shore 30 feet or more within 200 feet of the water
- 7. Land has difficult soils for development and wastewater treatment
- 8. Land is located near significant water bird or aquatic habitat.

These low density characteristics are general considerations which have been used to identify low density areas. The concept area map defines the plan recommendation on where these areas are located. In some cases, areas have developed in higher densities even though they qualify as low density areas under the listed criteria. The existing development pattern, however, would make a low density designation impractical.

This concept area is mostly concentrated on the north side of Lake Vermilion, on islands and areas with limited road access.

Low densities are recommended in order to maintain the current character of these areas. Other concerns such as limited access from a public safety and service provision point of view, building constraints such as bluffs, wetlands, bedrock, and the limited ability to effectively treat wastewater in most areas, warrant a lower development density. Most of these lands have experienced limited development historically because of these limitations and because other land more suited for development was available.

Concept Area Four: Moderate Density Development

Generally, these areas have a moderate density development character, access to a public road, and development does not present significant environmental and/or aquatic concerns. This concept area is split between the north and south side of Lake Vermilion and includes some islands. This concept area applies to parts of the lake that have levels of development between 3 and 25 dwellings per mile of shoreline, and may contain some public lands.

Concept Area Five: High Density Development Areas

These are areas with extensive existing development which in general, are on parcels of less than one acre in size and less than 150 feet in width with good road access. This area is predominantly located on the south side of Lake Vermilion and covers the parts of the lake which have the highest concentration of development on private land.

Performance standards have the greatest potential to address the lake management concerns in this area. Standards should focus on shoreland management, reducing runoff and maintaining the aesthetic quality of the lake. Performance standards should be required for all expansions and construction in the high density development areas. Development in these areas that would require a zoning or septic variance would need a greater number of mitigation points than development that would not require a variance. Mitigation measures are found in Appendix B.

Concept Area Six: Resorts and Water Related Commercial Uses

The intent of the Vermilion Plan is to ensure a continued variety of commercial activity throughout the lake. Resorts, campgrounds, restaurants, marinas and other water related commercial activities provide a variety of opportunities for lake residents and visitors that set this lake apart from many other lakes. The Vermilion Plan strongly supports varied land uses on the lake provided any environmental or land use compatibility issues are addressed. The Shoreland Mixed Uses (SMU) zone district may be retained for existing uses until an alternative zone district is developed with overlay for Shoreland Commercial. The new zone district will allow these commercial uses to expand and adapt to the changing needs of the market and landowner. Additional commercial uses on the lake will be encouraged in areas already having concentrated commercial activities provided that the proposed uses comply with the intent of this plan and all applicable regulations. Commercial development must relate primarily to the needs of lake visitors and lake property owners.

Lake Vermilion Land Use Plan Policies

I. LAND USE

Policy 1: Implement the outlined plan concepts by amending the zoning map for Lake Vermilion to reflect the multiple use character of the lake

The plan establishes concept areas of the lake with similar characteristics. This allows land use management practices to better reflect the character of different parts of the lake. The concept areas can be found on the future land use concept map. The concept areas also provide guidance for future requests for zoning classification changes.

Policy 2: Require lands within the high, moderate and low density concept areas to be zoned residential, except when the area meets the criteria for shoreland mixed use and shoreland commercial overlay outlined in Policy 8.

Policy 3: Set the minimum standard for non-riparian lots within the shoreland area at 4.5 acres with 300 feet in width or the standard for the riparian lot, whichever is greater.

Policy 4: Establish guidance for new development protecting the water quality and aesthetic character of Lake Vermilion

New development can negatively impact the lake's water quality and aesthetic character through vegetation removal, construction of boathouses, docks, shoreline alteration, large structures and choice of building materials.

Retaining native vegetation is a high priority in the shore and bluff areas to reduce visual impacts as well as to reduce impacts from development on water quality. Native vegetation includes trees, mid-story shrubs and ground cover. Where native vegetative cover exists, only selective removal of native vegetation is recommended. Pruning of trees rather than removal is the preferred method of providing a view to the lake. In no case is intensive vegetation removal or manicured lawn recommended within the shoreland impact zone. Where minimal native vegetative cover and/or where mowed/manicured lawn exists, it is recommended that native vegetation be planted to replace the lawn. The larger the structure, the more important a combination of design and vegetative screening is in reducing the visual impacts.

Require a vegetation inventory within the shore setback area for new development. This vegetation inventory will serve as a starting point when evaluating impacts from new development.

All new development must first demonstrate that there is sufficient area for sewage treatment and treatment expansion area. Variance requests resulting from the size or location of structures that affect the sewage treatment system area shall be considered a self-created hardship.

Policy 5: Support existing setbacks for accessory structures.

According to the shoreland inventory, there are on average two water-related structures such as: docks, boathouses, boatlifts, saunas, fish cleaning houses, for each principal structure, or an estimated 5,200 structures. Seasonal docks and boatlifts are currently not regulated other than by DNR standards regulating size and period of operation.

Policy 6: Develop standards for water access property.

As building sites with good road access become more limited, water access development is likely to increase. Increased water-access-only development can lead to parking problems at public access points. Further, barge operators use public accesses to haul materials and equipment to the building site. It is important to consider the impacts of these developments on the "mainland" during construction and once in use.

Policy 7: Implement mitigation standards for all conditional uses and variances permitted on non-conforming lots of record.

Policy 8: Resorts and other water related commercial activities provide significant services for Lake Vermilion residents and visitors. Resorts provide a significant opportunity for the public to utilize the County's water resources, and it is in the public's interest for the County to encourage the long-term viability of the industry. Commercial development must relate primarily to the needs of lake visitors and lake property owners. The County's efforts to support commercial activities should include the following:

- a. Developing a revised zoning formula for determining development densities for resorts that recognize environmental constraints while recognizing the unique needs of the industry. This formula will be based on coverage of buildings on the site rather than the present standard that utilizes the average size of structures.
- b. The County shall work with resort operators to determine existing resort capacity. This information will be utilized to determine the baseline for future development and use.
- c. Allow the modernization of resorts, including the reconstruction or replacement of cabins located within the shore setback area.
- d. Streamlined approval process for the redevelopment of resorts.
- e. Recognition of the changing needs of resort visitors and resort owner's need for flexibility in responding to those needs.
- f. Environmental issues, conformance with other statutes and regulations and the adequacy of public services and facilities shall be considered during any review of commercial expansions.

In order to accomplish this policy, it is recommended that the County develop a new zone district to be used by resorts and other water related uses, with an overlay for shoreland commercial. Until the revised standards are adopted, resorts and other uses shall continue to be in a mixed use zone district.

Policy 9: Allow in residential zone districts neighborhood commercial uses as a conditional use. These uses shall be small, low impact businesses that do not adversely affect neighborhood development patterns or the quality of lake or lake water, such as bed and breakfasts, tour businesses, or barge services for property owners. Generally, the business owner or manager lives on or near the site. It is the responsibility of the applicant to

demonstrate that the proposed development complies with the intent of the plan. Conditional use applications for these businesses shall require the lakeshore mitigation measures stated in the plan and the applicant shall demonstrate that the proposed use conforms with the policies of this plan and the criteria set forth in the zoning ordinance for conditional use approval.

PLANNED UNIT DEVELOPMENTS (PUD)

Policy 10: The PUD planning process can have a benefit for the lake through a greater control of the site planning process, and the ability to negotiate conditions which can work toward a site design that supports the goals of this plan. Shoreland protection benefits water quality through storm water, wastewater management, and vegetation management. Density increases, in those areas where this is an option, should only be allowed if the developer can show a proposed Planned Unit Development that supports the plan goals and the development leads to the protection of shoreland and water quality and maintains the aesthetic quality of the lake that is equal to or better than traditional development methods. The following guidelines shall apply to planned unit developments on Lake Vermilion:

- 1. Commercial Planned Unit Developments are allowed only in Shoreland Mixed Use and Shoreland Commercial zone districts.
- 2. Residential Planned Unit Developments may have a density bonus as calculated under county ordinances in non-riparian parcels.
- 3. Residential Planned Unit Developments shall consider environmental, aesthetic, neighborhood and public facility impacts of the proposal.

VARIANCES

Policy 11: Establish land development guidance for existing non-conforming lots of record, expansion of non-conforming structures, and development for which a variance is requested.

Many non-conforming lots exist on Lake Vermilion. The intensity and character of the use of these properties has changed since the time these lots were recorded. This change in management of development and use of properties brings with it concerns regarding impacts from development on these lots on water quality and the aesthetic quality of Lake Vermilion. The plan recognizes that owners of existing non-conforming lots are entitled to a reasonable use of the property. The strategies, as stated in the Actions for this policy, are intended to strengthen the policies currently in place and to mitigate some of the impacts of development on these existing non-conforming lots. Variances may be granted only under the limited circumstances provided by Minnesota Chapter 394.

Policy 12: Lots shall be eligible for building without a variance provided that they were in compliance with zone district standards that were in effect prior to the enactment of both the new Lake Vermilion Plan and new Zoning District standards that were adopted on July 1, 2009.

Policy 13: Variances to exceed the maximum allowed boathouse size in accordance with Minnesota Shoreland Rules and county ordinances shall require a clear finding of hardship.

II. Water Quality

Policy 1: Implement adequate wastewater management.

Improperly treated wastewater around the lake can contaminate ground water and surface water resources creating a health hazard. Wastewater management on Lake Vermilion is a challenge because of the following reasons: difficult soils for adequate treatment, development on small lots, areas around the lake have developed in high densities that make it difficult to find alternative treatment sites for wastewater treatment through on-site systems, and building sites and septic systems are competing for the best land. Increasing building size and accessory buildings impacts septic area and replacement area.

Policy 2: Implement adequate surface water runoff measures from both existing development and new construction.

Surface water runoff management of shoreland development is critical to maintaining or improving the water quality of Lake Vermilion. Impacts from surface water runoff will need to be addressed on two fronts: Mitigating the impacts of existing development and preventing further degradations of the water quality by new development. Incorporating Best Management Practices (BMP's) in new construction is often more cost effective than retrofitting existing development.

Increased amounts of phosphorous can lead to increased algae growth. According to the MPCA Lake Assessment, 28 percent of the phosphorous loading in the lake can be attributed to direct runoff. An increase in phosphorous can further degrade the water quality of the lake and could lead to increasing occurrence of nuisance algae blooms and shift the balance of this productive lake from desirable to less desirable species of fish.

Policy 3: Implement adequate nutrient and mining contaminants management from the watershed into Lake Vermilion.

Wetlands and mining have the potential to contribute contaminants or nutrients that impact the water quality and require monitoring and potential management. Wetlands absorb phosphorous and during large rain events significant amounts of phosphorous can be released into the lake. An example of this was the algae blooms after the storm event on July 4, 1999.

The largest source of nutrients in the watershed comes from the 60,000 acres of wetlands. The outlets of major wetlands should be monitored, especially during large rainfall events and major snowmelt events. Pike Bay is most sensitive regarding nutrient loadings from the watershed. The creation of holding areas at or near wetland outlets should be investigated.

Careful monitoring of the taconite tailing facilities near the top of the watershed should be continued and periodically reported to Lake Vermilion government units.

Policy 4: Implement adequate exotic/invasive species prevention management.

The Vermilion Plan supports the State of Minnesota's goals relating to exotic/invasive species. Those goals are: prevent introductions of new harmful exotic/invasive species into Minnesota, prevent the spread of harmful exotic/invasive species within Minnesota, reduce the impacts caused by harmful exotic/invasive species to Minnesota's ecology, society, and economy. The Actions stated in Appendix A should be continued or expanded to address this significant issue facing the lake.

Policy 5: Monitor water quality trends on Lake Vermilion, including the cumulative impacts of new development such as planned unit developments, subdivision plats, shoreland commercial uses and other uses.

III. Lake Character

Policy 1: Implement dark sky management with an emphasis on reducing glare, light trespass, and sky glow.

Many residents on Lake Vermilion appreciate the dark night sky on the lake allowing them to see the reflection of the stars and the moon on the lake, as well as appreciate the northern lights. A dark sky is an important part of the Lake Vermilion outdoor experience.

Lake Vermilion is experiencing increasing light pollution on the lake as a result of poorly designed light fixtures or excessive outdoor lighting. One key problem is the increasing installation of Mercury Vapor lights by local utility companies. Artificial lighting, of course, has important benefits. It allows residents to engage in nighttime activities that would be impossible or unsafe under normal nighttime conditions. Whether it is boating, fishing or simply sitting on the porch to read, artificial light allows us to do these activities. Other functions include lighting for safety and commercial uses, for example, to draw attention to a business. With a projected increasing population on Lake Vermilion, proper lighting will be important in order to protect the dark sky on the lake.

A dark sky or sensible lighting policy would address three of the most serious problems:

Glare: The first principle of good lighting is to illuminate only what needs to be seen. When a distant point of light is seen across the water or when light from the fixture is seen rather than what the fixture is to illuminate, it creates a glare. Poorly designed or poorly installed lighting cause glare that can severely hamper the vision of boaters, pedestrians, cyclists and drivers, creating a hazard rather than increasing safety.

<u>Light Trespass</u>: Glare is also the most common cause of light trespass. Light trespass is a light fixture on one property that illuminates an adjacent or nearby property. Light trespass is a description of a nuisance effect of improperly aimed lights on someone else's property. Because the waterfront is unobstructed, water reflects glare from shoreland lights over the water to trespass to distant properties.

Sky Glow: Much of our exterior lighting shines directly upward, causing the sky to glow and impeding our view of the dark night sky.

Distribute information to Lake Vermilion Residents on proper lighting of their property. Work with local utility companies promoting the use of dark sky light fixtures.

St. Louis County should work with Lake Vermilion residents on the development of a shoreland lighting ordinance. The intent of such an ordinance would be to encourage lighting practices and systems which will minimize light pollution, glare, light trespass, and conserve energy while maintaining nighttime safety, utility, security and productivity. Main concerns are addressing nuisance from light trespass and sky glow obscuring the night sky.

Policy 2: Promote shoreland preservation.

Over 80 percent of Lake Vermilion is privately owned and 45 percent is developed. The undeveloped shoreland of Lake Vermilion is important for the protection of the lake's water quality, supports a diversity of wildlife and has aesthetic and recreational values. Residents strongly support the preservation of the existing public lands. The following recommendations work towards protecting undeveloped shoreland on both public and private lands. Guidance, entitled "Actions", is found in Appendix A.

Policy 3: Provide guidance on public lands should they become privately held and there is a rezoning request. This policy does not require a rezoning should this change in ownership take place, but states that it could be allowed and that adjacent plan concepts will be used in reviewing any rezoning request.

Policy 4: Establish a sensitive resource inventory with the assistance of all stakeholders. These stakeholders shall develop a method for distribution and use of the inventory. Examples of areas that would be considered as sensitive include the following:

- Cemeteries and burial grounds
- Soudan State Park
- Cultural sites significant to Indian and early European settlement
- Areas with more than 600 feet of shoreland in contiguous wetlands
- Near shore areas with aquatic vegetation that is important for fisheries
- Water bird nesting areas

Policy 5: Include input from representatives of interested parties regarding development proposals impacting sensitive areas.

IV. Wildlife & Habitat

Policy 1: Work with the Minnesota Department of Natural Resources (DNR) to implement adequate restrictions limiting the number of fishing tournaments, tournament contestants and boats, and pre-tournament practice fishing on large lakes.

Lake Vermilion has recently seen an increase in larger scale fishing tournaments. With these tournaments come a number of concerns which include noise from high powered boats, nuisance fishing under docks, high speeds through narrow channels, the potential for introduction of invasive species and the adverse effects fishing tournaments may have on the fishery. Fishing contests are regulated by the DNR as the permitting agency. The current rules are quite liberal allowing five fishing contests per month on large lakes, including three large contests (50 boats or more), unlimited numbers of boats and participants in each contest, unlimited "pre-fishing" (practice days), more than one tournament on a lake on any one day, and ten total days of tournament fishing in any month.

APPENDIX A: IMPLEMENTATION ACTIONS

Introduction: Many of the policies have recommended actions. These actions are intended to provide guidance on the administration of the plan. They are not part of the plan and therefore no plan amendments are necessary. New ideas or approaches may be developed consistent with the plan.

I. LAND USE

- **Policy 4, Action A:** Develop standards that make development less visible from the lake.
- **Policy 4, Action B:** Ensure that adequate wastewater treatment and expansion areas are set aside as a first step in the development process.
- **Policy 5, Action A:** The Department of Natural Resources, after consulting with local governments and citizen groups, is encouraged to develop special regulations relating to boatlifts and docks. These regulations would address setback, size, design and number of water related structures.
- **Policy 5, Action B:** Work with the DNR to develop new policies that address wet boathouses, including grandfathering language to address existing boathouses.
- **Policy 5, Action C:** Garages and other storage buildings larger than 800 square feet should be set back further from the lakeshore and side property lines than is required for smaller buildings.
- **Policy 5, Action D:** Ensure that the development of accessory buildings does not limit the ability of the lot to accommodate a septic expansion area.
- **Policy 6, Action A:** Identify how water-access-only property will address parking and boat storage at the mainland water access point.
- **Policy 6, Action B:** The county and DNR may need to study the need for additional parking at certain water access areas.
- Policy 6, Action C: Address how developers of water access property will transport equipment and materials to their building sites.
- **Policy 8 Action A:** The following will be the guiding principles for the revised county ordinance relating to the shoreland commercial overlay:
 - 1. Existing lodging facilities may modernize or alter the footprint for the purposes of building, fire, handicapped accessibility and other codes, including the replacement of cabins with a standard permit.
 - 2. If the alteration involves cabins within the shore setback area, such an alteration is permitted if the following standards are met:
 - a. The overall resort capacity is not changed. A survey of resorts will be prepared to determine existing resort capacity.
 - b. The structure will not come nearer to the lake or river than previously existed with the old cabin.
 - c. Expansion of the individual cabins not due to issues relating to fire, handicapped accessibility or other codes should primarily be to the rear of the existing cabin except when an expansion to the side is authorized in accordance with the standards for other non-conforming principal structures as stated in the St. Louis County Zoning Ordinance.
 - d. Mitigation measures are implemented.
 - e. Height of the structure does not increase except to meet fire code or to improve the roofline for snow conditions.

- f. The combining of individual cabins into a larger cabin is permitted if overall resort capacity is not changed. The new cabin shall be at the average shore setback of the two cabins.
- 3. Resort cabins and lodges are considered principal uses. If a cabin or lodge expansion results in increased capacity or the expansion is not based on code compliance (i.e. fire or handicapped accessibility code) then the building may utilize the expansion of non-conforming structures provisions of the zoning ordinance.
- 4. Upon adoption and implementation of the Shoreland Commercial Overlay, expansion of existing resort facilities is allowed with a land use or other similar permit for customary uses such as cabins for overnight visitors, boat rentals, gas sales. Typical resort expansion allowed under regular permit includes uses intended solely for guests such as retail stores, food service, and storage buildings. Uses that alter the character that will require a conditional use permit include marinas catering to the general public, boat repairs open to the public, restaurants and bars open to the public, and conversions to hotels/motels and planned unit developments.
- 5. Density standards should be based on the overall coverage of buildings in relationship to the total land area of the resort. This standard replaces the previous density standard that was based on the average size of each structure. This policy will permit the re-development of cabins based on the amount of coverage all structures in the resort have rather than the size of individual cabins. In addition, resort cabins may be removed and reconstructed provided resort capacity is not changed. The structure coverage requirement will be developed in the zoning standards upon receiving information from resort owners relating to the existing development at resorts.
- 6. Resort capacity may increase provided that the new structures meet all setback and density requirements. Resort cabins are eligible for shoreline averaging provisions of the zoning ordinance.
- 7. Resorts may expand docking for overnight guests of the lodge. Expansion of docking for the public may require a conditional use permit if the resort had not previously offered public marina services, or that the expansion would significantly alter the character of the resort.
- 8. Resorts are eligible to construct water oriented accessory structures in the same manner as permitted for residential uses.
- 9. Roads, bridges, and road entrances for all resort expansions shall be sufficient to meet the standards of the local road authority. Specific authorization from the local road authority may be required as part of development review.
- 10. The local fire department recommendations should be followed.
- 11. New waterfront commercial operations are required to obtain a conditional use permit.

- 12. All new or expanding facilities shall meet the mitigation standards of the Vermilion Plan and those standards shall address the entire resort facility. Resorts shall be given credit for verified mitigation measures previously taken relating to control of storm water management, on-site sewage treatment, vegetative buffers, and enhancement of near shore aquatic conditions for fish and wildlife habitat.
- 13. All resort expansions shall meet the requirements of county, federal and state wetland regulations and other regulations of the county, state or federal government.

Policy 10, Action A: Develop clear standards for Planned Unit Developments (PUD) which reflects the community's vision of shoreland development. This may include the adoption of new approaches to planned unit developments.

Policy 10, Action B: Use of the following guidelines should be considered when reviewing a planned unit development proposal for Lake Vermilion:

- 1. Seventy percent of the shoreland impact zone should be in a natural state and the entire shoreland impact zone should be open space.
- 2. Fifty percent of the land of the entire development should be open space.
- 3. Open space does not include: building footprint, roads, parking areas, sidewalks, recreation areas (such as pools and tennis courts), and drain field sites.
- 4. The development should be able to retain storm water from a 10 year storm event for 24 hours on site.
- 5. No density bonus should be given in the first tier of development.
- 6. Impervious surface in the first tier should not exceed 20 percent.
- 7. Development should have a minimum setback of 100 feet from the lake.
- 8. Dockage should be limited to one boat per unit for the units in the first tier.
- 9. All additional watercraft not in use should be stored so they are not visible from the lake.
- 10. A single water access should be used to launch and dock boats. No individual docks for the first tier units should be allowed. Docks should be built perpendicular to the shoreline as much as possible. A T-structure should be limited as much as possible to limit the visual impacts of the structure. If boatlifts are provided, they should use earthtone colors that blend in with the surrounding area.
- 11. The development should blend in with its surroundings considering summer leaf-on conditions. The front of the building should use natural materials and colors.
- 12. Side-yard setbacks and screening should receive due consideration in relation to the character of the development and the surrounding properties. For example, a PUD development with a single family home character could follow setbacks as required by the underlying zoning district. A larger multiple family unit or lodge/resort type development would warrant a greater setback: (For example, double the underlying zoning requirement or more depending on the character of the structure and adjacent property use.)

- 13. The size of the PUD should be such that it can support an active homeowner association capable of effectively managing open space and communal infrastructure. A recommended size would be 15-20 units as a minimum for an effective organization.
- 14. A lock-out room should be considered a unit when evaluating the number of units for a development.

Policy 10, Action C: Resort conversions can occur in accordance with one of the following three options:

- 1. **Residential Planned Unit Development** This standard will apply when use of the units is intended as a home, or place where individuals or a family actually reside at a specific point in time. They shall meet the following requirements: The density and design of the development must meet the standards of the zoning and subdivision ordinance, or the land use plan, whichever is more restrictive. Where non-conforming structures exist, the unit will be designed to allow redevelopment at the required setbacks.
- 2. **Commercial Planned Unit Development** This standard will apply when use of the units is intended to be short-term rental, like that of a resort. They shall meet the following requirements:
 - a. Where non-conforming structures exist, the unit will be designed to allow redevelopment at the required setbacks. For example, in the case where a cabin is located 20 feet from the lake, the unit shall either have area that can meet the lake setback or a new unit designated for redeveloping the cabin.
 - b. There is a common management entity for the facility.
 - c. The units shall be available for rent to the public.
 - d. The St. Louis County Lodging Ordinance will be followed.
 - e. The use of limited common element (includes those common areas and facilities designated in declarations as reserved for specific uses) along the shore of the lake is permissible, including restrictions placed on the common element relating to which units can use the property.
 - f. The following issues shall be reviewed during the hearing process: wetland impact, docking, fire safety, adequacy and location of roads, addressing and road names, on-site sewage treatment and provisions for protecting sites and for required improvements, water supply, surveying and boundary issues, legal road access to the property, storm water management, and vegetation protection and replacement within the shore impact zone.
- 3. **Subdivision -** Plat property using the standards of the St. Louis County Zoning Ordinance 46 and St. Louis County Subdivision Ordinance 33.

Policy 11, Action A: Provide guidance on the development of non-conforming lots.

- 1. Require mitigation measures, as defined pursuant to Policy 7, for issuance of a variance.
- 2. Implement mitigation measures for variances. Measures are in Appendix B. These measures should include proper screening of the structure and the use of building materials that blend in with the surrounding environment, proper maintenance of a vegetated buffer within the shoreland impact zone, a suitable site for wastewater treatment and an alternative site identified and protected, a storm water management plan.

- 3. Discourage variances from the 35 foot height standard for principal structures and the standards set for accessory structures.
- 4. Consider the impervious surface area created by a new development in reviewing a variance request. The impervious surface area on substandard lots should not exceed 20 percent or 25 percent with a storm water management plan in place on lots two acres or less.
- 5. Identify non-conforming lots through an inventory. The county should promote consolidation of neighboring substandard lots in single ownership by contacting the landowners. The county should inform the landowners about the development limitations on their non-conforming lot.

Policy 11, Action B: Provide guidance on shoreline setbacks:

- 1. County ordinances may allow some non-conforming structures located within the shoreland impact zone to expand without a variance, and, therefore, a permit given under this section should require the implementation of mitigation measures.
- 2. Use shoreline averaging standards on lots where this standard applies.
- 3. Maximize the setback from the lake and encroach more upon the road setback on lots where there is a lack of depth between the shoreline and road.
- 4. Ordinance Number 46, Article IV, Section 3.02, allows some non-conforming structures located within the shore impact zone to expand without a variance. Permits given under this section require the implementation of performance standards.

Policy 12 Action A: The following guidelines should be used in amending county ordinances relating to nonconforming lots:

- 1. Minimum lot area or width standard should be set.
- 2. Use is permitted in the zone district.
- 3. Lot was created in compliance with all official controls in effect at the time of lot creation.
- 4. On-site sewage treatment requirements are implemented.
- 5. All setbacks are followed.
- 6. Mitigation measures, as outlined in this plan, are implemented.

II. Water Quality

Policy 1, Action A: Develop and implement a comprehensive wastewater management plan for Lake Vermilion which maintains and restores the high water quality for both surface and groundwater resources.

1. Utilize existing databases to identify and prioritize problem areas.

- 2. Work privately with property owners in the identified problem areas on identifying an appropriate treatment solution. Treatment solutions can include performance based and cluster systems where traditional treatment approaches are not effective.
- 3. Study the need for the development of a lake management organization responsible for wastewater management covering all of Lake Vermilion. Such an organization would give residents of Lake Vermilion the ability to comprehensively plan for their wastewater needs; monitor the lake water quality; and finance wastewater projects.
- 4. Ensure that all new development has adequate room for wastewater treatment and an alternative treatment site.
- 5. Ensure that expansion, addition, and construction of accessory buildings, driveways and roads does not encroach upon septic treatment areas or alternative treatment sites.

Policy 2, Action A: Reduce the quantity and improve the quality of surface water runoff from parcels already developed on Lake Vermilion.

- 1. Require the implementation of run-off mitigation measures as a requirement for new construction or expansion on already developed parcels.
- 2. Implement the guidance for variances for development on sub standard lots as described in the land use concepts of this plan.
- 3. Reduce the allowable impervious coverage to 20 percent for permitted uses on half acre and one acre lots. Applicants would be allowed to increase to the current standards of 25 percent if they provide storm water retention on site.
- 4. Modern construction practices involve increasing use of heavy equipment which impacts soil erosion. The county should specifically require that all construction on the lake use Best Management Practices to contain nutrients and sediment on site.
- 5. Develop an education effort targeted towards property owners on how shoreland development impacts water quality and the use of Shoreland Best Management Practices to reduce these impacts.
 - a. Use the shoreland and photo inventory to target areas for education efforts.
 - b. Give an award each year to a home or development on the lake that is an example of lake-friendly management. Publish the award, a picture and a description in the local media and sportsmen's club newsletter.

Policy 2, Action B: Prevent increases in runoff associated with new development on the lake. Require new development to be lake friendly.

- 1. Require a storm water management plan for all new subdivisions and planned unit developments. Each parcel shall be capable of managing a ten year storm event on site. Development on an existing lot shall be capable of managing a five year storm event on site.
- 2. Implement the guidance for variances for development on substandard lots as described in the land use concepts.
- 3. Modern construction practices increasingly use heavy equipment. The county should specifically require that all new construction on the lake use Best Management Practices to contain nutrients and sediments on the site.
- 4. Develop an educational effort that provides information on shoreland best management practices for new construction. Take advantage of existing educational materials and fact sheets from DNR, Soil and Water Conservation District, Extension Service and others.

- 5. Reduce the allowable impervious coverage to 20 percent for permitted uses on half acre and one acre lots. Applicants would be allowed to increase to the current standards of 25 percent if they provide storm water retention on site.
- **Policy 2, Action C:** Stress restoration of damage and prevention of water quality impacts as a result of the violation of shoreland regulations. Other legal penalties **may** be imposed where appropriate in addition to restoration.
- **Policy 3, Action A:** Monitor nutrient input from the outlets of major wetlands.
- **Policy 3, Action B:** Monitor the taconite discharge basins.
- **Policy 4, Action A:** Continue and expand programs targeted towards prevention of exotic/invasive species being introduced into the lake and monitoring the spread of exotic/invasive species in the Lake.
 - 1. Support current exotic species monitoring and prevention programs in place through the Lake Vermilion Sportsmen's Club.
 - 2. Work with the DNR on the implementation of an exotic species volunteer program.
 - 3. Monitor Lake Vermilion three times a year for the presence of known exotic species.
 - 4. Target public accesses on peak days such as fishing opener, July 4 and fishing tournament dates to educate lake users on how to inspect their boats and identify exotic species.
 - 5. Work with the DNR to require checking of fishing tournament boats for exotics as a condition for fishing tournament permits.
 - 6. Encourage residents and lake users to watch for exotics while they are using the lake.
 - 7. Develop a boat and trailer disinfection program that is mandatory.

III. Lake Character

- **Policy 1, Action A:** Develop an educational effort to address dark sky issues.
- **Policy 1, Action B:** Consider the development of a shoreland lighting ordinance that addresses light pollution concerns.
- **Policy 1, Action C:** A mitigation measure relating to light standards may be developed by the Planning Commission.
- Policy 2, Action A: Establish a policy limiting development of new public funded access to parts of the lake that currently have water access only.
- **Policy 2, Action B:** Create an overlay zone that would zone all public lands at 35 acre minimum lot sizes if public land would be exchanged to a private entity.

Policy 2, Action C: Establish a program that provides the technical assistance needed to assist property owners in implementing the performance standards required for certain permits. This should include a listing of resources of both public agencies and private entities. The county could, in cooperation with other agencies, develop opportunities for developers, builders and realtors to learn more about shoreland rules and best management practices.

IV. Wildlife & Habitat

Policy 1, Action A: Support any future efforts by the Minnesota Legislature and the DNR to change laws and regulations pertaining to fishing tournaments in Minnesota, as to 1) make them more respectful and less damaging to Minnesota lakes and waterways, 2) less offensive to the general public peace, and 3) prevent the introduction of exotic species.

Policy 1, Action B: Support the Sportmen's Club of Lake Vermilion and other groups when they work with Minnesota Legislators and the DNR to modify existing fishing tournament laws and regulations according to the recommended guidelines included.

APPENDIX B: Mitigation Measures

Introduction: Mitigation measures are choices a landowner can make to protect the lake environment. There are many ways this protection can take place but in the past the county often required specific conditions that had to be implemented. The use of mitigation measures provides the landowner with a list of choices that address the environmental issues facing lake development. The mitigation measures require a land owner to select actions equaling at least <u>six</u> points with one point coming from sewage treatment and another point coming from storm water management. If there are subsequent applications the reviewing body may consider previously adopted mitigation measures for compliance or for the need for additional mitigation measures. Mitigation measures shall be considered as part of the permit as approved and subject to standard enforcement measures. The landowner shall provide selected mitigation measures on a form approved by the County.

Effectuation of mitigation measures: These measures shall be in effect until County or region wide measures are implemented. These measures will be amended at the time of implementation by new county-wide measures.

Violations: No points are authorized for restoration of violations committed by the property owner.

1. **Special Mitigation Practices** - choose at least 6 points from the following, with at least 1 point being from stormwater/erosion control and one point from On-Site Sewage Treatment.

A. Storm Water/ Erosion Control

- 1. Restore native vegetation buffer area within 25 feet of OHW. Buffer shall cover the entire width of the lot except for the minimum necessary area for pedestrian lake access. (1 point)
- 2. Restore native vegetation buffer area within 50 feet of the OHW. Buffer shall cover the entire width of the lot except for the minimum necessary area for pedestrian lake access to the water. (2 points)
- 3. Restore native vegetation buffer area within 75 feet of OHW. Buffer shall cover the entire width of the lot except for the minimum necessary area for pedestrian lake access. (3 points)
- 4. Maintain existing native vegetation in the entire structure setback area. (up to 2 points). The land owner must demonstrate that within the shore impact zone there are trees and shrubs covering at least 75 percent of the area for 2 points. One point may be earned if the land owner can demonstrate that at least 50 percent of the shore impact zone is covered in trees and shrubs.
- 5. Restore adequate screening in the Shore Impact Zone and or bluffs and steep slopes in accordance with an approved plan (2 points)
- 6. Restore or maintain the buffer area within ten feet of the lake (1 point)
- 7. Restore native vegetation buffer area in both sideyards. (1 point)

- 8. Restore or plant aquatic vegetation, with DNR approval, within 50 feet lakeward of OHW. (1 point)
- 9. No sodding or seeding within 50 feet of lakeshore except for the minimum necessary area for pedestrian lake access to the water. (1 point)
- 10. For existing development reduce peak runoff from post to pre-development for a one inch rainfall by 25%. (1 point)
- 11. For existing development reduce peak runoff from post to pre-development for a one inch rainfall by 50%. (2 points)
- 12. Revegetate or by other means address erosion or run off from steep slopes and bluffs. (2 points)
- 13. For new development, no net increase in pre to post-development for the 1 inch, 24 hour rainfall event. (2 points)
- 14. Limit impervious coverage within 300 feet of lake or river shore to 15% or less. (2 points)
- 15. Install green (vegetative) roofs on new construction. The minimum structure size shall be 400 square feet. Smaller structures may be eligible for points reducing peak run off (maximum of 4 points)
- 16. Measures to effectively address runoff from driveways, trails, sidewalk, roads, and parking lots. (1 point)
- 17. Maintain existing stormwater/erosion control measures. (up to 3 points based on effectiveness of measures)

B. On-Site Sewage Treatment

- 1. Demonstrate effective septic system maintenance such as regular pumping or water meters. (1 point)
- 2. Specific measures taken to protect on-site sewage treatment expansion area. (1 point)
- 3. Construction of a new complying on-site septic system with expansion area. (2 points)
- 4. Existing septic system passes certificate of compliance. (2 points)
- 5. Connection to a functioning cluster septic system or municipal system. (2 points)

C. Additional Environmental or Quality of Life Measures

- 1. Remove nonconforming accessory building from structure setback area. (1 point)
- 2. Use exterior building materials that blend with natural vegetation. (1 point)
- 3. Implement dark sky standards. (1 point)
- 4. Restore wetlands that have been degraded or filled. (2 points)
- 5. Other measures as determined by Planning Commission, Board of Adjustment or County Board. (Up to 3 points based on effectiveness of measures)